

CLAIMS

What is claimed is:

1           1.       A method comprising:  
2           receiving a signal by a wireless electronic device;  
3           measuring a level of effective isotropic radiated power associated with the  
4           signal;  
5           determining whether a conversion table within the wireless electronic device  
6           includes an entry containing the measured power level, the conversion table including  
7           (i) a first plurality of entries associated with measured power levels and (ii) a second  
8           plurality of entries, corresponding to the first plurality of entries, each associated with a  
9           suggested power level; and  
10          adjusting the measured power level to a corresponding suggested power level if  
11          the measured power level is contained in an entry of the conversion table.

1           2.       The method of claim 1, wherein no adjustment of the measured power  
2           level is needed if the corresponding suggested power level is equal to the measured  
3           power level.

1           3.       The method of claim 1, wherein the wireless electronic device is an  
2           access point.

1           4.       The method of claim 1, wherein the adjusting of the measured power  
2           level is performed in accordance with a logarithmic function.

1           5.       A method comprising:  
2           producing a control setting displayed on a monitor associated with an access  
3           point operating in accordance with Institute of Electrical and Electronics Engineers  
4           (IEEE) 802.11; and  
5           adjusting a coverage distance for the access point through adjustment of a  
6           power level of signals transmitted from the access point.

1           6.       A method comprising:

2 transmitting a signal having a first level of effective isotropic radiated power by  
3 a first wireless electronic device;  
4 reducing a level of effective isotropic radiated power to a second level of  
5 effective isotropic radiated power if a response to the signal is received by the first  
6 wireless electronic device within a predetermined period of time.

1 7. The method of claim 6 further comprising:  
2 increasing a level of effective isotropic radiated power to a third level of  
3 effective isotropic radiated power if no response to the signal is received by the first  
4 wireless electronic device within the predetermined period of time.

1 8. The method of claim 7, wherein the third level of effective isotropic  
2 radiated power is greater than the second level and less than the first level.

1 9. The method of claim 7, wherein the increase of the level of effective  
2 isotropic radiated power is performed in accordance with a logarithmic function.

1 10. The method of claim 6, wherein the first wireless electronic device is an  
2 access point.

1 11. The method of claim 6 further comprising:  
2 increasing a level of effective isotropic radiated power to a third level of  
3 effective isotropic radiated power if no response to the signal is received by the first  
4 wireless electronic device within the predetermined period of time and after a  
5 predetermined number of retries.

1 12. The method of claim 7, wherein a rate of change from the first level of  
2 effective isotropic radiated power to the second level of effective isotropic radiated  
3 power is greater than a rate of change from the second level of effective isotropic  
4 radiated power to the third level of effective isotropic radiated power.

1 13. A method comprising:

2 monitoring a level of effective isotropic radiated power associated with at least  
3 one beacon produced by a first wireless electronic device on a first communication  
4 channel; and

5 reducing the level of effective isotropic radiated power of the beacon if the level  
6 is greater than a predetermined power level threshold.

1 14. The method of claim 13, wherein the beacon is a delivery traffic  
2 indication message.

1 15. The method of claim 13, wherein the monitoring of the level of effective  
2 isotropic radiated power further includes monitoring at least one beacon produced by  
3 the first wireless electronic device on a communication channel adjacent to the first  
4 communication channel.

1 16. A wireless electronic device comprising:  
2 logic to measuring a level of effective isotropic radiated power associated with  
3 the signal;

4 logic to analysis entries of a conversion table within the wireless electronic  
5 device to determine whether one of the entries contains a value equivalent to the  
6 measured power level, the conversion table including (i) a first plurality of entries  
7 associated with measured power levels and (ii) a second plurality of entries,  
8 corresponding to the first plurality of entries, each associated with a suggested power  
9 level; and

10 logic to adjust the measured power level to a corresponding suggested power  
11 level if the measured power level is contained in an entry of the conversion table